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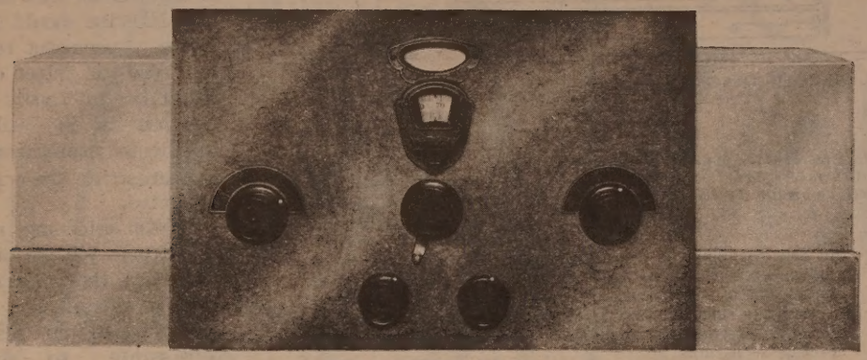
THE HORN SPEAKER



THE CONTROL PANEL

Figure 2. The window just above the tuning dial discloses the visual tuning meter, a material aid in tuning to obtain exact resonance and best quality of reproduction

CLASSIC Lincoln Deluxe SW-33

By William C. Dorf

FIDELITY of reproduction, sensitivity and selectivity are of course looked for today in a new receiver by the modern listener but with the rapid modern development in tubes and circuit design, the discerning fan expects far more than just these three features. More than likely, for instance, he will want to have an all-wave receiver so that when the spirit moves him he can tune in on the foreign broadcasts, the amateur bands, the police bands and other interesting reception available throughout the short-wave spectrum. He will probably also give thought to such modern developments as automatic volume control, band switching arrangements, low noise level and simplicity of operation.

For such a person the new Lincoln DeLuxe SW-33 receiver is by all means worthy of consideration. It offers a surprising number of strictly up-to-date features, including some that forecast developments which will undoubtedly be more or less generally adopted during the next year or so by many other manufacturers of receivers.

This receiver is not one of the mass production type but is a laboratory designed and laboratory built set which enables it to enjoy the advantages of high precision both in construction and on the test bench. The article this month will be concerned primarily with the outstanding practical and technical features of the receiver while the article next month will provide some information on the results obtained with this receiver under test by the RADIO NEWS staff.

The receiver employs twelve tubes in all. The first detector is followed by four tuned intermediate-frequency stages and all of these employ type -51 variable-mu tubes. The oscillator employs a type -56 tube while the new Wunderlich tube used as the second detector also functions as an automatic volume control. The audio channel employs two stages, both of the push-pull type. The first stage, transformer coupled to the detector, employs two type -56 tubes. Their output is transformer coupled to the pair of -45's which serve in the power output stage. The rectifier is one of the -80 type and feeds into a two-stage filter with the speaker field serving as one of the chokes. The main deviation from conventionality in the filter system is the inclusion of shunt resistors across the filter condensers. These represent a type of bleeder circuit which is helpful in maintaining good voltage regulation and likewise in the prevention of overloading of the rectifier and the condensers.

The coils employed in the tuned circuits are wound on individual forms to eliminate the dead-end losses which would be encountered were tapped coils to be employed. The coils for each band are selected by means of a multiple switch which is controlled by the upper left hand knob on the front panel (Figure 2). These coils, together with the band-changing switch are indicated at the left hand end of the schematic diagram, Figure 1. As will be noted, inductive coupling is used in the antenna input circuit for all wave bands.

For the broadcast band, the input tuning condenser and the oscillator condenser are ganged to provide single control and are operated by the central knob located just beneath the dial window on the front panel. The input tuning condenser, C1, when the band selector switch is set for the broadcast band, is shunted by a smaller variable condenser, C3. This is controlled by the upper right hand knob on the front panel and serves as a trimmer condenser for broadcast tuning. When operating on the four short-wave bands, C1 is automatically cut out of the circuit and all of the input tuning is accomplished by means of C3, only the oscillator condenser, C2, being controlled by the main tuning knob for these wavelengths. Thus on the broadcast band, the receiver is substantially single control, although allowing for more precise adjustment by including the control knob of C3 on the front panel. For short-waves the receiver is actually two control but its operation is simplified by the fact that the setting of C3 is not critical.

The intermediate-frequency amplifier employs four stages, as stated before. These are inductively coupled with the primary of each coupling transformer tuned by means of a midget condenser mounted directly on the individual shield can which encloses each coupling unit. The secondaries are untuned except in the case of the coupling unit between the fourth i.f. tube and the detector. In this unit the primary is untuned but the secondary, which serves as the input for the detector, is of the tuned type.

This receiver is one of the first to adopt the new Wunderlich tube in the detector circuit. This tube not only serves as an excellent detector but provides a simplified method for automatic volume control. In the plate circuit is included a visual tuning meter. Not only does this meter simplify the tuning process by providing visual indication of exact resonance when tuning in stations; it also makes the process of lining up the intermediate-frequency stages extremely simple. In most receivers an output meter, a screw driver and a considerable amount of patience are required in lining up intermediate stages and even then it is frequently almost impossi-

SERVICING

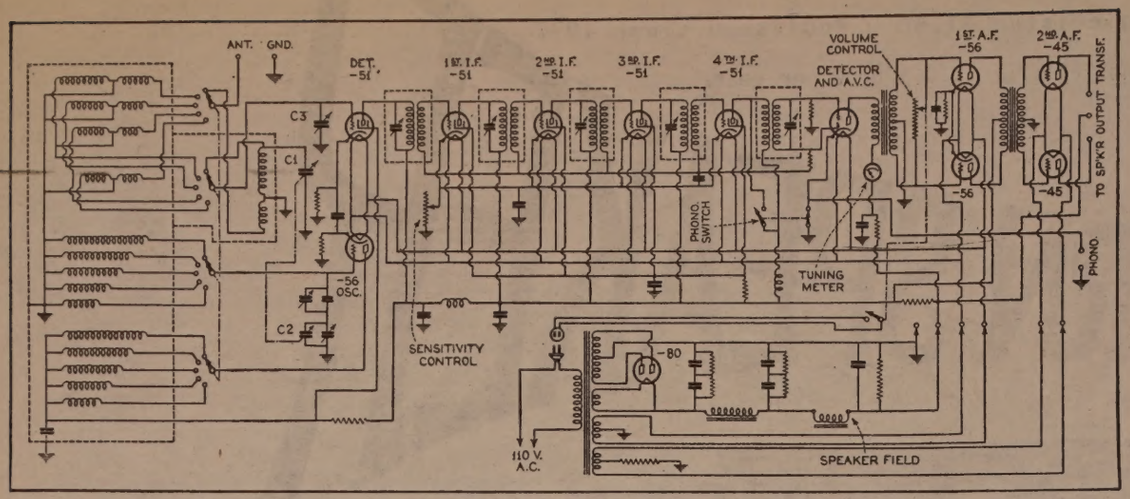
ELECTROLYTIC CAPACITORS

By Tom Tompkins, owner,
Metco Electronics

Electrolytic capacitors are among the most frequently replaced items in the repair of a vintage AC power radio. Named after the electrolyte that enables their higher capacitance to fit in a small package, they are usually employed to filter the rectified B+, and sometimes serve as bypass capacitor in the cathode circuit of audio stages. There will generally be at least two of these capacitors in a set, perhap contained in a single package and sharing a common negative (or rarely, positive) connection. Shapes will vary, but frequently are cylindrical, and you often find electrolytics housed in a metal can protruding from the top of the chassis.

These capacitors, which by their very nature cannot last indefinitely, fail in two ways. They can dry up, gradually losing their capacity until they no longer do an adequate job of filtering and the radio begins to hum loudly. Or, they may develop a decreasing internal resistance known as "leakage," which puts a strain on the power supply to which the capacitor is connected. The result may be hum or poor reception due to lowered B+ voltages, or even overheating of the power transformer, filter choke, or resistors.

It is beneficial, therefore, for the collector to have a means of testing the electrolytics in a set for both capacity and "leakage." An older model RLC



THE SCHEMATIC CIRCUIT DIAGRAM

Figure 1. Four stages of transformer-coupled, plate-tuned i.f. are employed, feeding into a W'underlich tube which combines the function of second detector and automatic volume control

ble to line them up exactly because of the detuning effect encountered in inserting the screw driver within the shields which enclose the transformers. In this receiver adjustment is made by means of the small Bakelite knobs mounted on top of the i.f. transformer cans.

The lining-up process consists simply in tuning in a station (preferably a distant one) and then adjusting the i.f. tuning controls until the visual tuning meter shows the maximum deflection. This entire operation can be accomplished in a minute or two and is absolutely precise. To insure keeping the intermediate frequency at the desired value, a guide line indicating the approximately correct setting for the i.f. tuning condensers is inscribed on the top of each can.

There are other features of the circuit but they need not be discussed here as they are self-evident to anyone making a careful study of the schematic circuit diagram in Figure 1.

The automatic volume control is not included simply as a talking point, but actually does provide automatic control to a highly effective degree. The manual control of the audio volume level is obtained by means of a variable resistance across the secondary of the first audio-frequency transformer. Once this control has been set for the desired loudspeaker level all stations which would normally be heard above this level are cut down, thus all local stations can be received at a very close approximation to the same volume level, and distant stations as well, provided they are not too far distant.

Sensitivity control and manual volume control are entirely distinct. The sensitivity control, which is the lower left hand knob on the front panel, varies the bias supplied to the grids of the four i.f. tubes. Actually this control serves a dual purpose. By regulating sensitivity it also varies the amount of noise picked up. Thus in a relatively noisy location, the sensitivity control can be adjusted to a point just above the noise level. When this has been done then all stations, local and distant, will be received without local background noise. For one who has operated a receiver employing automatic volume control, the advantage of this arrangement will be readily appreciated. If it were not for this possibility of noise suppression, the noise level when tuning between stations might be most annoying inasmuch as the automatic volume control feature is operative only when a station is tuned in, and in the absence of a signal permits the receiver sensitivity to go up to maximum, with high noise level at such times.

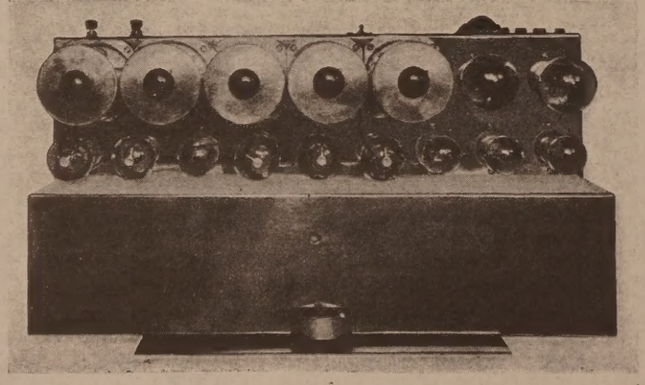
The advantages of the visual tuning meter require little stressing. With such a powerful and selective receiver as this one, the best tone quality is obtained only when the receiver is tuned exactly to the desired station. If the dial setting is a hair's breath above or below its exact setting, quality may be seriously affected. For one with sufficient experience it is possible to closely approximate the correct setting by ear. However, the visual meter makes this process a much more simple one and insures exact tuning adjustment for the best quality of reproduction.

A simple yet extremely important aid in short-wave tuning, is the gear-shift vernier arrangement on the main tuning dial. This takes the form of a small lever, projecting out underneath the main tuning control. With this lever thrown to one side, the reduction ratio of the tuning control is approximately the same as that normally employed in broadcast receivers. But by throwing this lever to the left, this ratio is greatly increased, becoming 53 to 1. In other words, with the lever in this position a quarter of a revolution of the tuning knob changes the tuning less than one degree on the 100 degree dial. This arrangement is particularly helpful in tuning the critical short-wave stations to exact resonance and also in finding short-wave stations. Especially on the lower wavelengths under 30 meters, it is all too easy to skip over a station completely if a receiver provides a tuning control ratio of only ten to one or thereabouts.

As to the physical construction, the reader can be largely left to judge for himself from the photographs shown *(Cont'd on page 8)*

THE TOP OF CHASSIS

Figure 3. All coils and condensers are completely enclosed in shields, each i.f. coupling unit in its individual can (at the rear). A knob on the top of each can permits exact alignment of the i.f. amplifier without tools or meters other than the tuning meter on the front panel



bridge or capacitor tester is the preferred test instrument, provided it has facilities for indicating leaking current. If you haven't one already, try to pick up such a device through a classified advertisement or at a swap meet, as it will prove most useful to you in your radio work. Lacking the proper test equipment, the best way to determine the condition of an electrolytic capacitor is to temporarily substitute a new one in its place to see if an improvement results. At least one lead of the original capacitor should be disconneted from the circuit during this test to eliminate the effect of any leakage that may be present. This likewise should be done when making a permanent replacement. In the case of filter capacitors, a reduction in audio hum or an increase in B+ voltage with a substitute capacitor connected indicates that the original part is defective.

When selecting a replacement capacitor, you are interested in matching the capacity and DC working voltage, wV, as closely to the original as possible. It is permissible to substitute a capacitor of somewhat higher values, but under mo circumstance should you install a replacement which has a lower wV than the circuit demands. If you are in doubt about about the operating voltage or polarity of the capacitor being replaced, a quick check with a DC voltmeter will reveal both. Be aware, however, that a malfunction in the set could be holding the B+ voltage low, and additional checks of the wV later in the repair are in order.

Although it often involves extra work, It is generally possible to substitute one or more axial or radial lead single section capacitors for an original of any style. I find it handy to have several types of terminal lug strips available for capacitor replacement. Where components and wires are soldered directly to the terminal(s) of a metal cased electrolytic, one of these strips may be mounted nearby and the leads transferred to it. Replacement capacitors of recent manufacture are a better bet than those that have been in storage for many years, since electrolytics will deteriorate over time, even if unused, and you could end up substituting one which is equally defective.

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AURORA

On the Air

A M translator

AM TRANSLATOR

by Rich Modafferi

A very useful adjunct to a collection of antique radios is a device which would allow one to broadcast radio signals, records or tapes into their old radios. This would make them old time functional as well as old time beautiful.

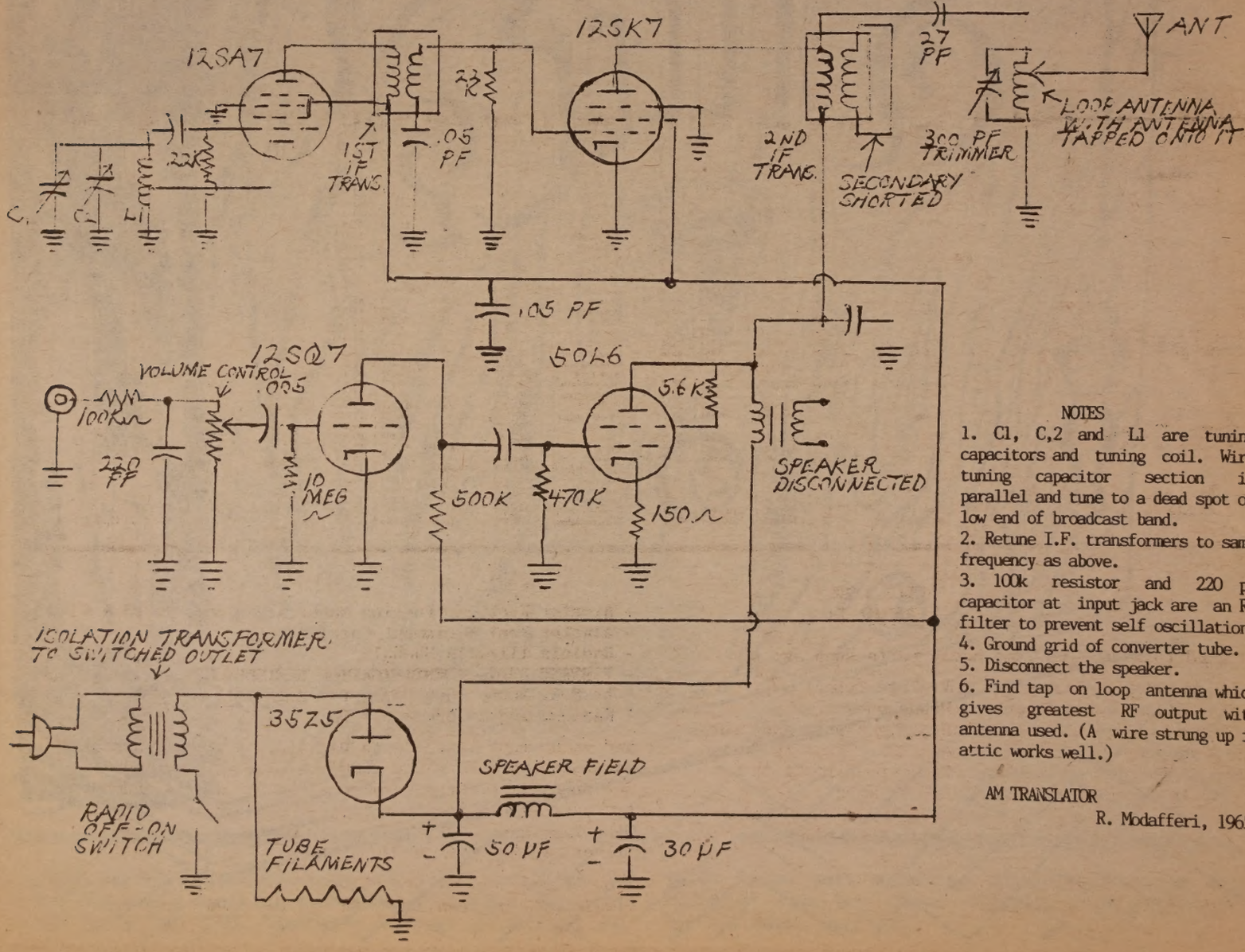
I found an easy way to build such a device, which I call an AM TRANSLATOR. Every collector has a surplus of "plastic all American fives" and one of these is easily made into an AM TRANSLATOR by merely moving a few wires and adding a few small parts. I took a brown Emerson plastic radio, circa 1940, and modified it as shown in the enclosed schematic.

A picture of the installation is shown, which uses the AM TRANSLATOR in conjunction with an FM tuner, shortwave radio, and a cassete machine (not shown) for broadcasts to my old radios. This AM TRANSLATOR has been use for about 15 years.

The slender box on top of the FM tuner is a compander which allows me to "compress" my broadcast audio so I can have a real "authentic" AM sound!

Several friends have built AM TRANSLATORS similar to mine, with success. One caution— If the set is line connected like mine, use an isolation transformer!

For the technically minded, the modified radio becomes a miniature M.O.P.A. (master oscillator power amplifier) transmitter with about 1 Watt RF output, with a plate modulated final RF stage.mine is tune to 640 KHZ, which is a good dead spot here. Range is about 100 feet on a short antenna, which increases to about 1/2 mile (rural locations only) on a long outside antenna.



NOTES

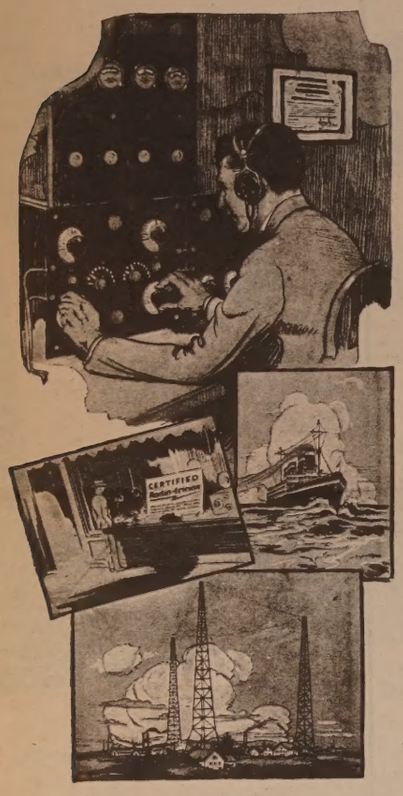
1. C1, C,2 and L1 are tuning capacitors and tuning coil. Wire tuning capacitor section in parallel and tune to a dead spot on low end of broadcast band.
2. Retune I.F. transformers to same frequency as above.
3. 100k resistor and 220 pf capacitor at input jack are an RF filter to prevent self oscillation.
4. Ground grid of converter tube.
5. Disconnect the speaker.
6. Find tap on loop antenna which gives greatest RF output with antenna used. (A wire strung up in attic works well.)

AM TRANSLATOR

R. Modafferi, 1965

1932 LOCATION OF RADIOS →

see it first in The Horn Speaker



Advertise in The Horn Speaker

City and State	Population	No. of Families	No. of Radio Sets	% of Families Having Radio Sets
Alabama	2,646,248	592,530	56,491	9.5
Birmingham	259,678	64,443	17,228	26.7
Mobile	68,202	16,909	3,090	18.3
Montgomery	66,079	17,195	3,206	18.6
Arizona	435,573	106,630	19,295	18.1
Phoenix	48,118	12,066	3,655	28.9
Arkansas	1,854,482	439,408	40,248	9.2
Little Rock	81,679	20,123	6,617	32.9
California	5,677,251	1,618,533	839,846	51.9
Berkeley	82,109	24,440	14,995	61.4
Fresno	52,513	14,556	5,521	38.6
Glendale	62,736	19,324	13,617	70.5
Long Beach	142,032	47,153	27,243	57.8
Los Angeles	1,238,048	370,462	217,730	58.8
Oakland	284,063	83,350	48,214	57.9
Pasadena	76,086	23,068	13,751	59.6
Sacramento	93,750	24,886	13,298	53.4
San Diego	147,995	45,454	23,242	51.1
San Francisco	634,394	180,346	87,536	48.5
San Jose	57,651	16,872	9,239	54.8
Stockton	47,963	12,488	6,320	50.6
Colorado	1,035,791	268,531	101,376	37.8
Denver	287,861	79,879	40,526	50.7
Pueblo	50,096	12,360	3,975	32.2
Connecticut	1,606,903	389,596	213,821	54.9
Bridgeport	146,716	35,902	20 983	58.5
Hartford	164,072	40,796	21 587	52.9
New Britain	68,124	15,568	6 773	43.5
New Haven	162,655	39,647	21 470	54.2
Stamford	46,346	10,944	6 657	60.8
Waterbury	99,902	23,125	9,451	40.9
Delaware	238,380	59,295	27,183	45.8
Wilmington	106,597	25,694	13,720	53.4
District of Columbia				
Washington	486,869	126,014	67,880	53.9
Florida	1,468,211	377,823	58,446	15.5
Jacksonville	129,549	32,555	8,058	24.8
Miami	110,637	30,902	7,587	24.6
St. Petersburg	40,425	12,749	3,061	24.0
Tampa	101,161	25,111	3,695	14.7
Georgia	2,908,506	654,009	64,908	9.9
Atlanta	270,366	68,021	17,691	26.0
Augusta	60,342	15,421	2,065	13.4
Columbus	43,131	10,569	1,627	15.4
Macon	53,829	13,938	1,991	14.3
Savannah	85,024	22,495	3,405	15.1
Idaho	445,032	108,515	32,869	30.3
Boise	21,544	5,931	2,396	40.4
Illinois	7,630,654	1,934,445	1,075,134	55.6
Aurora	46,589	12,038	8,259	68.6
Berwyn	47,027	12,206	9,532	78.1
Chicago	3,376,438	845,868	534,284	63.2
Cicero	66,602	16,276	10,641	65.4
Decatur	57,510	15,421	7,374	47.8
E. St. Louis	74,347	19,122	7,910	41.4
Evanston	63,338	16,472	12,579	76.4
Joliet	42,993	10,547	6,109	57.9
Oak Park	63,982	17,021	14,036	82.5
Peoria	104,969	26,627	14,538	54.6
Rockford	85,864	22,187	13,553	61.1
Springfield	71,864	18,799	8,984	47.8
Indiana	3,238,503	844,463	351,540	41.6
East Chicago	54,784	11,609	5,367	46.2
Evansville	102,249	25,769	8,708	33.8
Ft. Wayne	114,946	29,199	17,869	61.2
Gary	100,426	23,232	10,711	46.1
Hammond	64,560	15,513	9,477	61.1
Indianapolis	364,161	98,841	46,524	47.1
Muncie	46,548	12,498	5,805	46.5
South Bend	104,193	25,682	13,424	52.3
Terre Haute	62,810	17,612	7,148	40.6
Iowa	2,470,939	636,905	309,327	48.6
Cedar Rapids	56,097	15,350	8,005	52.2
Council Bluffs	42,048	10,849	5,705	52.6
Davenport	60,751	16,706	8,994	53.8
Des Moines	142,559	38,190	19,621	51.4
Dubuque	41,679	10,472	4,989	47.6
Sioux City	79,183	20,051	9,972	49.7
Waterloo	46,191	11,957	6,384	53.4
Kansas	1,880,999	488,055	189,527	38.8
Kansas City	121,857	31,667	13,221	41.8
Topeka	64,120	17,468	8,487	48.6
Wichita	111,110	30,021	11,308	37.7
Kentucky	2,614,589	610,288	111,452	18.3
Covington	65,252	17,271	7,945	46.0
Lexington	45,736	12,080	3,299	27.4
Louisville	307,745	80,297	26,894	33.5
Louisiana	2,101,593	486,424	54,364	11.2
New Orleans	458,762	112,329	23,650	21.1
Shreveport	76,656	20,087	6,044	30.1
Maine	797,423	196,272	77,803	39.2
Portland	70,810	17,582	8,319	47.3
Maryland	1,631,526	386,087	165,465	42.9
Baltimore	804,874	194,491	95,108	48.9
Massachusetts	4,249,614	1,024,527	590,105	57.6
Boston	781,188	180,451	101,273	56.1
Brockton	63,797	16,724	9,735	58.2
Brookline	47,490	11,539	8,934	77.4
Cambridge	113,643	27,524	15,171	55.1
Chelsea	45,816	9,917	4,818	48.6
Chicopee	43,930	9,418	4,264	45.3
Everett	48,424	11,404	7,303	64.0
Fall River	115,274	27,077	12,047	44.5
Fitchburg	40,962	9,860	4,319	43.8
Haverhill	48,710	12,764	6,277	49.2
Holyoke	56,537	14,010	7,045	50.3
Lawrence	85,068	20,097	7,388	36.8
Lowell	100,234	23,805	9,593	40.3
Lynn	102,320	26,001	16,726	64.3
Malden	58,036	14,187	9,412	66.3
Medford	59,714	14,413	10,478	72.7
New Bedford	112,597	27,982	10,390	37.1
Newton	65,276	16,350	11,990	73.3
Pittsfield	49,677	12,093	6,758	55.9
Quincy	71,963	18,343	13,255	72.3
Revere	35,680	8,042	5,057	62.9
Salem	43,353	10,110	5,902	58.4
Somerville	103,908	25,552	16,363	64.0
Springfield	149,900	38,183	23,224	61.1
Worcester	195,311	46,020	27,564	59.9
Michigan	4,842,325	1,183,157	599,196	50.6
Battle Creek	43,573	11,091	5,927	50.7
Bay City	47,355	11,457	5,475	47.8
Dearborn	50,358	11,476	6,925	60.3
Detroit	1,568,662	371,344	215,494	58.0
Flint	156,492	37,757	19,721	52.3
Grand Rapids	168,592	43,567	21,482	49.3
Hamtramck	56,268	11,303	2,986	26.4
Highland Park	52,959	13,038	8,397	64.4
Jackson	55,187	14,335	8,152	56.9
Kalamazoo	54,786	13,567	7,090	51.1
Lansing	78,397	20,132	11,060	54.8
Muskegon	41,390	10,349	5,471	52.9
Pontiac	64,928	15,189	7,906	52.1
Minnesota	2,563,953	608,398	287,880	47.3
Duluth	101,463	23,984	11,961	49.9
Minneapolis	464,356	117,777	70,192	59.6
St. Paul	271,606	67,999	40,488	59.5
Mississippi	2,009,821	472,354	25,475	5.4
Jackson	48,282	11,130	2,102	18.9
Missouri	3,629,367	941,821	352,252	37.4
Kansas City	399,746	109,242	53,361	48.9
St. Joseph	80,933	21,085	9,869	46.9
St. Louis	821,960	213,680	108,267	50.2
Springfield	57,527	15,687	4,250	27.1
Montana	537,606	137,010	43,809	32.0
Butte	39,532	10,352	2,812	27.2
Nebraska	1,377,963	343,781	164,324	47.8
Lincoln	75,933	20,229	10,177	50.3
Omaha	214,006	54,845	28,835	52.6
Nevada	91,058	25,730	7,869	30.6
Reno	18,529	5,093	2,273	44.6
New Hampshire	465,293	119,660	53,111	44.4
Manchester	76,834	18,832	7,652	40.6
New Jersey	4,041,334	987,616	625,639	63.4
Atlantic City	66,198	16,956	9,000	53.0
Bayonne	88,979	18,564	10,515	56.6
Camden	118,700	27,874	14,848	53.3
Clifton	46,875	11,335	7,358	64.9
East Orange	68,020	19,077	14,957	78.4
Elizabeth	114,589	26,772	16,192	60.5
Hoboken	59,261	13,655	7,005	51.3
Irvington	56,733	13,106	11,532	78.3
Jersey City	316,715	76,436	48,237	63.1
Kearny	40,716	9,709	7,398	76.2
Montclair	42,017	10,058	7,441	74.0
Newark	442,337	105,398	57,360	54.4
Passaic	62,959	14,847	7,843	52.8
Paterson	138,513	35,556	21,414	60.2
Perth Amboy	43,516	9,616	4,803	50.0
Trenton	123,356	27,183	15,112	55.6
Union	58,659	16,127	10,060	62.4
New Mexico	423,317	98,820	11,404	11.5
Albuquerque	26,570	6,821	2,006	29.4
New York	12,588,066	3,162,118	1,829,123	57.8
Albany	127,412	34,186	19,129	56.0
Binghamton	76,662	18,880	9,127	48.3
Buffalo	573,076	140,215	76,983	54.9
Elmira	47,297	12,303	5,462	44.4
Jamestown	44,158	12,367	5,287	42.8
Mount Vernon	61,499	15,361	10,833	70.5
New Rochelle	54,000	12,542	8,967	71.5
New York	6,930,446	1,728,695	1,021,451	59.1
Niagara Falls	75,460	17,626	10,472	59.4
Poughkeepsie	40,288	10,602	5,963	56.2
Rochester	328,133	82,206	45,814	55.7
Schenectady	95,692	24,281	13,962	57.5
Syracuse	209,326	53,203	29,795	56.0
Troy	72,763	19,034	9,595	50.4
Utica	101,740	24,935	12,103	48.5
Yonkers	134,646	32,582	21,136	64.9
North Carolina	3,170,276	645,345	72,329	11.2
Asheville	50,193	11,782	3,543	30.1
Charlotte	82,675	19,319	6,422	33.2
Durham	52,037	11,508	2,105	18.3
Greensboro	53,569	11,528	3,117	27.0
Winston Salem	75,274	17,210	2,729	15.9
North Dakota	680,845	145,382	59,352	40.8
Fargo	28,619	6,679	3,108	46.5
Ohio	6,646,697	1,700,877	810,767	47.7
Akron	225,040	62,689	32,831	52.4
Canton	104,906	26,365	13,355	50.7
Cincinnati	451,160	122,832	59,756	48.6
Cleveland	900,429	222,131	106,921	48.1
Cleveland Hts.	50,945	13,271	10,844	81.7
Columbus	290,564	75,806	37,957	50.1
Dayton	200,982	52,839	29,268	55.4
Hamilton	52,176	13,219	6,526	49.4
Lakewood	70,509	19,656	14,993	76.3
Lima	42,287	11,468	5,261	45.9
Lorain	44,512	10,205	4,278	41.9
Portsmouth	42,560	10,669	3,833	35.9
Springfield	68,743	18,237	9,542	52.3
Toledo	290,718	74,205	45,386	61.2
Warren	41,062	9,921	4,799	48.4
Youngstown	170,002	39,101	17,907	45.8
Oklahoma	2,396,040	565,348	121,973	21.6
Oklahoma City	185,389	47,394	17,297	36.5
Tulsa	141,258	37,156	14,707	39.6
Oregon	953,786	267,690	116,299	43.5
Portland	301,815	87,375	50,220	57.5
Pennsylvania	9,631,350	2,239,179	1,076,770	48.1
Allentown	92,563	22,838	14,293	62.6
Altoona	82,054	20,005	8,913	44.6
Bethlehem	57,892	13,570	7,443	54.8
Chester	59,164	13,579	6,296	46.4
Erie	115,967	28,262	14,504	51.3
Harrisburg	80,339	21,652	12,035	55.6
Johnstown	66,993	15,076	5,723	38.0
Lancaster	59,949	15,433	7,572	49.1
McKeesport	54,632	12,484	5,480	43.9
New Castle	48,674	11,728	5,047	43.0
Philadelphia	1,950,961	459,629	258,640	56.3
Pittsburgh	669,817	165,519	81,279	52.3
Reading	111,171	27,706	15 553	56.1
Scranton	143,433	32,988	12,902	39.1
Wilkes-Barre	86,626	18,752	8,024	42.8
Williamsport	45,729	11,787	5,154	43.7
York	55,254	14,481	7,609	52.5
Rhode Island	687,497	165,811	94,594	57.1
Cranston	42,911	9,658	6,735	69.7
Pawtucket	77,149	19,121	11,928	62.4
Providence	252,981	61,628	33,827	54.9
Woonsocket	49,378	11,253	5,501	48.9
South Carolina	1,738,765	386,265	28,007	7.7
Charleston	62,265	16,746	2,375	14.2
Columbia	51,581	11,239	2,396	21.3
South Dakota	692,849	161,332	71,361	44.2
Sioux Falls	33,362	8,248	4,251	51.5
Tennessee	2,616,556	601,578	86,229	14.3
Chattanooga	119,798	29,262	6,761	23.1
Knoxville	105,802	24,381	6,005	24.6
Memphis	253,143	68,432	17,907	26.2
Nashville	153,866	39,501	11,130	28.2
Texas	5,824,716	1,383,280	257,686	18.6
Amarillo	43,122	10,976	3,870	35.3
Austin	53,120	12,815	2,819	22.0
Beaumont	57,732	14,512	3,396	23.4
Dallas	260,475	67,376	27,119	40.3
El Paso	102,421	24,564	4,702	19.1
Ft. Worth	163,447	43,167	14,877	34.5
Galveston	52,938	13,635	4,482	32.9
Houston	292,352	75,681	24,173	31.9
Port Arthur	50,902	12,522	3,103	24.8
San Antonio	231,542	55,898	14,618	26.2
Waco	52,848	13,329	3,918	29.4
Wichita Falls	43,690	11,744	4,195	35.7
Utah	507,847	116,254	47,729	41.1
Ogden	40,272	9,971	4,722	47.4
Salt Lake City	140,267	34,548	18,712	54.2
Vermont	359,611	89,439	39,913	44.6
Burlington	24,789	6,028	2,598	43.1
Virginia	2,421,851	530,092	96,589	18.2
Lynchburg	40,661	9,357	1,972	21.1
Norfolk	129,710	31,991	10,343	32.3
Portsmouth	45,704	11,276	2,867	25.4
Richmond	182,929	44,929	15,168	33.8
Roanoke	69,206	15,944	4,983	31.3
Washington	1,563,396	426,019	180,229	42.3
Seattle	365,583	101,794	53,107	52.2
Spokane	115,514	32,116	15,369	47.9
Tacoma	106,817	30,686	14,861	48.4
West Virginia	1,729,205	374,646	87,469	23.4
Charleston	60,408	14,128	5,770	40.8
Huntington	75,572	17,975	6,411	35.7
Wheeling	61,659	15,595	7,415	47.6
Wisconsin	2,939,006	713,576	384,425	51.5
Kenosha	50,262	12,088	7,469	61.8
Madison	57,899	15,097	9,371	62.1
Milwaukee	578,249	143,879	90,311	62.8
Oshkosh	40,108	10,308	5,582	54.2
Racine	67,542	16,845	11,292	67.0
Wyoming	225,565	57,218	19,482	34.0
Cheyenne	17,361	4,590	2,285	49.8
U.S.	122,775,047	29,980,146	12,078,345	40.3

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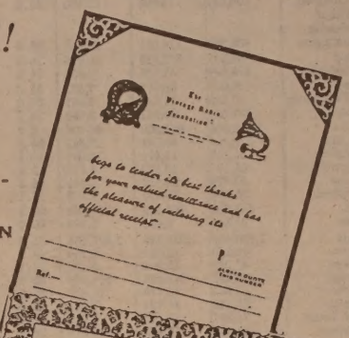

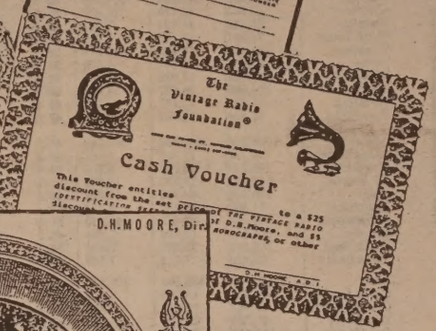

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.015	.21	.40
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.033	.26	.46
.047	.31	.48
.1	.40	.63
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SW-33

herewith. The coils and condensers of the input and oscillator circuits are enclosed within a long rectangular shield can immediately behind the front panel. The individually shielded i.f. circuits are enclosed in cans along the rear edge of the chassis and the tubes of the i.f., detector, oscillator and first a.f. stages are mounted in a straight line along the center of the chassis. The two -45's are mounted at the rear right hand corner in line with the i.f. shield cans. Both the chassis and the shields are highly polished and present a most attractive appearance. The front panel carries all of the dials and the visual tuning meter, which is shown just above the dial window.

On the rear wall of the chassis are tip jacks to accommodate a phonograph pick-up or a microphone transformer. If desired either one of these can be left plugged into these jacks at all times as a separate phonograph-radio switch of the toggle type is also provided on the rear of the chassis. The antenna and ground binding posts are also located on the rear of the chassis, at the extreme left end, and at the extreme right are the tip jacks into which the leads from the loudspeaker are plugged.

The power supply for the receiver is provided in the form of a separate unit. This arrangement serves the dual purpose of keeping the chassis down to reasonable proportions and at the same time separating the 60-cycle circuits from the receiver proper thus reducing hum to a minimum. When the outfit is installed in a console, the power supply unit is normally mounted in the compartment with the loudspeaker, thus providing sufficient isolation from the highly sensitive r.f., i.f. and detector circuits.

From the various features that have been discussed, it will be obvious to the reader that this receiver is one which theoretically offers unusually attractive possibilities. That these theoretical advantages are borne out in its practical operation has been clearly demonstrated in the preliminary tests conducted by the author. During the next two

RADIO NEWS FOR SEPTEMBER, 1932

VRPS

VRPS SPRING AUCTION-1990
by George Potter

The Vintage Radio and Phonograph Society held their Spring Auction March 17, 1990 and came up with a record amount over last year.

Our auctioneer Lew MaGrish started the auction and with help from Jim Sargent ended, selling $10,500 in 388 items. There was a good mixture of early gear, cathedrals, plastics and tubes—— all at very reasonable prices.

Because of space, test gear, misc., parts and boxes of tubes were not listed, as were some common 1950's plastic setes.

Some of the high price items were: DeForest F5-M - $200, Atwater Kent 84 cathedral - $250, Monroe D-7 - $110, Philco 89 cathedral - $250 and an Echophone cathedral at $190.

Please be aware that items listed, are auction prices and should not be assumed as "going prices" for receiver values. (Ed. auction prices are normally regarded as price trends instead of price guides.)

E = excellent, G = fair, P = poor.

VACUUM TUBES

DeForest 560,G .$10.00
2 WD-11 duds .. $20.00
3
DeForest duds, white base .. $7.50
3 80's, G .. $14.00
WD-12, G, in box .. $25.00
2 27 Arcturas, G .. $22.50
2 45's, G .. $15.00
4 BH tubes, G .. $10.00
NO.48 Arcturas, G $17.50
2 WE 295A, G .. $18.00
4 26 tubes, G .. $10.00
2 347's, G .. $10.00
Tube caddy/ 60 tubes, G .. $40.00
2 45's, G .. $15.00
T.V. caddy/ 182 tubes, G .. $80.00

RADIOS AND OTHER UNITS

Ferrand metal cath. speaker, G .. $20.00
1936 RCA &B6T tombstone .. $30.00
Western Electric headphones, G .. $10.00
Philmore xtal in box, G .. $10.00
Mine TV salt pepper shaker, G .. $6.00
Zenith 1940's anniversary radio .. P .. $9.00
Crosley Trirydyn w/ tubes, F .. $30.00
RCA phono 45 changer new in box .. $20.00
Silvertone 7 tube tombstone, G .. $60.00
3 bags of misc. 1920's knobs .. $15.00, $11.00 and $10.00
Sibley battery unit , quack, .. $17.00
Farradic battery unit, quack .. $20.00
Emerson table side radio #305, F .. #37.00
Peerless cathedral speaker, G .. $55.00
"PeeWee" radio, with orig. box inst., .. $50.00
RCA 66X3 radio, G .. $10.00
Zenith 13-603 portable .. 425.00
Zenith 55317 radio, inknown .. $35.00
Zenith 55319 radio, G .. $30.00
Diamond "B" battery .. $7.00
Echophone cath., restored, G .. $190.00
Zenith Royal S transistor .. $15.00
Westinghouse refrigerator style radio .. $65.00
RCA - 100 speaker, F .. $20.00
1935 Sentinel radio, G .. $30.00
Music Master wood horn, G .. $110.00
Vol. 1 Gernsbach manual .. $15.00
RCA speaker, nice tapestry, G .. $85.00
Home brew, loose coupler, G .. $47.50
Victor postcards .. $15.00
Freed Eisemann NR6, F .. $52.00
RCA #28 1933, E .. $100.00
Gem 61 6 tube, G .. $95.00
RCA 9T tombstone, F .. $70.00
SX-85 Hallicraters, E .. $50.00
Magnavox horn no. R-3, F $50.00
1924 BROADCAST mag. .. $10.00
Hallicrafter SX-71, F .. $20.00
British Kolster console .. $25.00
Radiola 18, G .. $80.00
Town Crier radio, G .. $60.00
Silvertone battery cathedral, G .. $95.00
AK H chassis & tubes, F .. $25.00
Homebrew spark transmitter, G .. $50.00
NC-183 w/ speaker, G .. $50.00
Tungar trickle charger, G .. $6.00
RCA tube sign, G .. $60.00
1925 RADIO NEWS bound .. $35.00
Crosley 5-50 N/T, F .. $22.50
Guild telephone country radio, F .. $47.50
Crosley Dynacone speaker, G .. $30.00
DeForest F5-M, E .. $200.00
Monroe D-7 3 tube set, G .. $110.00
Mengel crystal set, F to P .. $75.00
AK 33 receiver, F .. $65.00
Phonograph horn and crane, G $30.00
Kleertone antenna tuner in box, G .. $35.00
G.E. A-70 tombstone, G .. $65.00
Timmons speaker, G .. $35.00
Federal Orthosonic N/T, G .. $105.00
Westinghouse granfather clock radio, F .. $75.00
SAAL horn driver, G .. $17.50
Dalberg speaker radio, G .. $72.50
Meck trail blazer radio, G .. $40.00
Airline metal speaker, F .. $20.00
AK 44, tubes and speaker, G .. $40.00
12 1936 QST, G .. $10.00
Dictogrand horn driver, G .. $7.50
Phono. morning glory horn, F .. $27.50
Philco 37-610 tombstone, F .. $35.00
Hawkins No. 9 electric. book, G .. $10.00
Zenith 55-217 radio, F .. $50.00
Brandes headphones, G .. $10.00
Crosley fiver .. $25.00
Peerless cathedral speaker, E .. $45.00
Colonial bedside radio, G .. $35.00
Green Emerson AC/DC portable, G .. $10.00
Goodyear "Wings" radio, G .. $55.00
Victor IV phono., G .. $85.00

ATWATER KENT

NUMERICAL PARTS LIST

MODEL AND NUMBER OF RECEIVING SETS

This (X) Indicates Sets on which Parts are Used

Part No.	NAME OF PART	20 4640	9 4660	10 4700	12 4910	24 4920	20-C 7570	21 7780	20-C 7960	30 8000	30-A 8000-1	35 8100	32 8270	50 8500	33 8930	Price
7712	No. 3 R. F. Transformer						x									$2.00
7790	Battery Container							x								14.00
7805	Binding Spring Lead Wire	x				x		x	x	x		x				.04
7807	Cabinet Complete							x								10.00
7808	No. 1 R. F. Tube Socket Assembly (Comp.)							x								1.25
7809	No. 3 R. F. Transformer							x								2.00
7810	No. 2 Variable Condenser Transf. Assembly (Comp.)							x								10.00
7811	No. 2 R. F. Tube Socket Assembly (Comp.)							x								1.00
7812	No. 3 Variable Condenser and Transf. Assembly (Comp.)							x								10.00
7813	Detector and 2-Stage Ampl. Compl.							x								14.00
7815	Battery Cable							x								3.25
7816	Shipping Container							x								1.25
7830	Grid Condenser	x				x										.50
7838	No. 2 R. F. Transformer						x									2.00
7839	No. 2 R. F. Transformer							x								2.00
7840	Double Rheostat Switch Panel Assembly (Comp.)							x								4.75
7844	Tap Switch Knob Assembly					x	x	x	x							.85
7845	Tap Switch Base with Taps					x	x	x								1.40
7852	Instruction Book	x				x	x	x	x	x		x	x			.50
7853	Base and Socket Assembly with Tube Cont. Springs						x									3.50
7854	Base and Socket Assembly	x				x										3.80
7855	Base and Socket Assembly with Tube Cont. Spring							x								3.50
7893	Bypass Condenser (used after serial No. 409300) (supersedes 7646)	x	x	x	x	x	x	x	x	x		x	x			1.25
7893	Bypass Condenser (supersedes 7646)	x	x	x	x	x	x	x	x	x		x	x			1.25
7958	No. 2 Condenser Mt. Studs												x			.45
7960	Model 20 Compact Receiving Set															60.00
7961	Vernier Knob Screw									x	x		x	x	x	.10
7965	Condenser Pulley Belt									x	x					.15
7973	Vernier Knob Stud									x	x		x	x	x	.07
7975	Log Card (per 100)									x			x			.75
7977	Pulley Set Screw									x	x	x	x	x	x	.03
8000	Model 30 Receiving Set															80.00
8002	Binding Spring Lead Wire												x			.04
8014	Main Panel Name Plate									x						.50
8015	Name Plate Eyelets (per 100)											x				.10
8020	No. 1 Tube Socket												x			1.25
8020	No. 1 R. F. Tube Socket (used after serial No. 517001)									x						1.25
8021	No. 2, No. 3 or No. 4 Tube Socket								x				x		x	1.00
8021	No. 2 or No. 3 R. F. Tube Socket (used after serial No. 517001									x						1.00
8022	Det. 2-Stage Assembly Complete											x				14.00
8022	Detector 2-Stage Amplifier (used from serial No. 517002 to 522000)									x						14.00
8023	Panel Plus Angle Piece									x						2.75
8030	Det. 2-Stage Amplifier (used previous to serial No. 517001)									x						14.00
8035	Cabinet									x						15.00
8042	Shipping Container									x	x					.35 Ea
8060	No. 1 A. F. Transformer. See foot note										x	x	x		x	5.50
8060	No. 1 A. F. Transformer (used after serial No. 517001). See foot note								x	x						5.50
8062	Choke Coil									x						.85
8073	Var. Con. Bearing Tension Spring										x	x		x	x	.05
8085	Var. Con. Extension Washer										x	x		x	x	.04
8090	Rheostat Assembly											x				3.00
8092	Grid Resistance									x						.50
8094	Var. Con. Bearing Tension Spring										x	x				.15
8100	Model 35 Receiving Set															65.00
8106	Screw Holding Panel in Metal Container											x				.02
8108	R. F. Amplifier (Compl.) (used previous to serial No. 900000)											x				10.00
8110	Metal Container Complete Name Plate Corner Studs and Base											x				15.00
8112	Grid Condenser										x	x			x	.50
8120	Shipping Container											x				.30 Ea
3126	Fixed Resistance for A. F.											x				.26
8131	Phone Binding Post Screw									x	x		x	x	x	.03
8131	Ant. and Phone Post Screw											x				.03

All No. 1 A. F. Transformers carry the No. 8060. Specify whether round base, oval base of Transformer with dent on side is required.

(Continued from last month.)

Above is a cross reference list of all of the major parts used in the Atwater Kent battery radios between 1924 and 1927. It tells which sets each of the listed parts were used. This list was printed by A. K. in 1927.

Ray

(To be continued.)

Philco 37-35, F .. $27.50
Sential treasure chest cabinet, G .. $10.00
Echophone cathedral, G .. $90.00
Knight Skyrover radio, F .. $17.50
Radiola III, G .. $70.00
Crosley and wall speaker, G .. $24.00
Radiola type RC, G .. $80.00
Arkay tombstone radio, F .. $35.00
Federal #65 audio, G .. $10.00
Radiola 103 speaker, F .. $30.00
Brunswick radio with speaker, G .. $110.00
Echophone early cath., restored .. $190.00
Erla transformer, G .. $10.00
Knight Skyroamer manual, F .. $18.00
RCA lighted rorating tube display, G .. $95.00
Peerless cath. speaker, G .. $45.00
Ansonia cathedral speaker, G .. $45.00
AK 84 cathedral G, .. $250.00
Sparton 6 tube tombstone, G .. $110.00
Jackson Bell midget cathedral, G .. $105.00
Zenith 1948 AM-FM plastic, G .. $15.00
Philco 89 cathedral, G .. $185.00
black/chrome Truetone bakelite, G .. $40.00
Philco vacu-formed sign .. $17.50
Richman horn bell only, G .. $18.00
3 1923-34 RCA red books, .. $57.50
Crosley 1951 plastic colored radio, F .. $42.50
Arvin metal receiver, F .. $15.00
Zenith Transoceanic 6A40, F .. $25.00
RCA 45 RPM bakelite phonograph, G .. $5.00
Philco cabinet for 90, G .. $55.00
Emerson 832 green set, F .. $10.00
Zenith 503R, F .. $16.00
9 Telephony magazines 1915, G .. $10.00
2 step homebrew amplifier, G .. $45.00
Hammarlund kit set, G .. $55.00
Bunnell early telegraph key, G .. $75.00
Magnavox TRF receiver, G .. $45.00
General Radio variable audio transformers, .. $15.00

Here are a few private sale from Jerome Schliepp of Ripon Wisconsin: Murphy type A.262 English set, fair $22; RCA 100A speaker, needs cabinet work, $10; Setchel Carlson model 427 plastic, good, $25; Philco twin speaker turquoise plastic, good, $17; Admiral, bakelite, maroon, taller side knobs, handle $20; Airline bakelite, model 54BR-1504A, fair, $15; General Electric model 202, brown bakelite, real good, $15; Grain belt radio/ baseball scoreboard $30 and Philips tuner, wood cabinet, mono AM/FM SW 1&2, $45.

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6 months ... $60.00

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3 months ... $60.00
6 months .. $120.00

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6 months .. $240.00

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market

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Deadline.. 20th of the month.

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FOR SALE — AMATEUR EQUIPMENT

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SELLING ALL MY BOOKS, MAGAZINES, SAMS, Amateur radio items. Lots of misc. broadcast parts. Radio tubes, receiving and transmitting. Rider TV manuals. RUSS OLMSTED, 608 W. THOMPSON LN., MURFREESBORO, TN 37129.

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FOR SALE — ATWATER KENT

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AK 37 less power supply $60; 'ST'S in ARRL binders. 1955 thru 1965 — $125 plus shipping; several post WW II Hammarlund receivers - SASE. Parker, W1YG, 87 Cove Road, Lyme, CT 06371. (203) 434-7783.

****

ATWATER KENT 10B BREADBOARD. Original, solid, complete. With five good UX tubes. $795.00. Paul C. Crum, W9LC, 6272 Cicero Avenue, Chicago, IL 60646. (312) 282-3033.

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FOR SALE — FADA

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FADA MODEL 167-A — 5 TUBE - 3 DIAL NEUTRODYNE, CLEAN, WORKS WELL IN NICE CABINET - LESS TUBES — A STEAL AT ONLY $95.00 —— WM. J. KEY, W1DWD, 58 SYCAMORE DRIVE, HALIFAX, MA 02338 TEL. (617) 294-1831.

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FOR SALE — FREED EISEMANN

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FOR SALE: FREED EISEMANN, model NR-7, front of cabinet is good, cabinet could use varnish, with tubes, in working condition with home made power supply and original instruction book, very clean inside, No. 960BB. RCA model no. 75X17, serial no. B002243, rare Japanese art work on cabinet, works, very clean with tube layout, etc., on back of set, $175. Bill Wood, 714 W. Main Street, Memphis, TX 79245. (806) 259-2918.

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FOR SALE — GENERAL

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PLAY OLD TIME MUSIC ON YOUR ANTIQUE RADIOWITH THIS "PHONO OSCILLATOR!" THREE TRANSISTOR CIRCUIT HAS TUNING AND MODULATION CONTROLS - CONNECTS TO TAPE DECK OR TURNTABLE TO BROADCAST MUSIC, DRAMA, ETC. THROUGH ANY AM RADIO. OPERATES ON ORDINARY 9V BATTERY AND DRAWS LESS THAN 5MA. ALL COMPONENTS TO BE MOUNTED ON PC BOARD MEASURING LESS THAN 2" X 3" — PRICE FOR A KIT IS $19.95 PLUS $3.00 POSTAGE AND HANDLING. VT RESIDENTS SHOULD INCLUDE SALES TAX. ORDER FROM METCO ELECTRONICS, P. O. BOX 549, SHELBURNE, VT 05482.

****

SUPERIOR INST. GRENOMETER MODEL TV50A, AS IS, $15. — GREENWICH RADIO PRODUCTS VOLT- OHMMETER, VERY OLD $10. — STANCOR ISOLATION TRANS. P6298 $50. — HEATHKIT TV ALIGNMENT GENERATOR MODEL TS-4, $25. — AURICON SOUND ON FILM RECORDING AMPLIFIER MODEL EB-10, LOOKS GOOD, $50. — ITEMS $25.00 OR OVER SHIPPED FREE. —— JAMES FRED, R1, CUTLER, IN 46920.

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KENNEDY 15 MINT $425 — MUSIC MASTER HORN $150. — RADIOLA UZ1325 $70. — RADIOLA 103 SPEAKER $65. — VICTOR LUMIERE SPEAKER NO. 1 $65. — RADIO RECEIVER HORN $75. — 1924-30 RADIO CATALOGS —— ANTHONY CASERTA, 47 VISTA LANE LEVITSTOWN, NY 11756. (516) 731-7175.

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FREE: FLYER, 189C is now available and follows the trend set in flyer 198b. A whole line of beautiful tombstones and cathedral radios are featured. To get your copy send long 2 stamp SASE to: Olde Tyme Radio Company, 2445 Lyttonsville Road, Suite 317, Silver Spring, MD 20910. (301) 585-8776.

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FOR SALE OR TRADE FOR PRE WWII AMATEUR TRANSMITTERS. Radiola III with balanced amplifier $225.00 (less tubes); Freed Eisemann NR-12 Neutrodyne $180.00; A.K. model 20 compact $80.00; A.K. model 20 compact $80.00; A.K. model 32 $75.00. Prices include UPS shipping. Parker, W1YG, 87 Cove Road, Lyme, CT 0637———

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THE VINTAGE RADIO FOUNDATION - - - are you a member? - if not, get full information from Jim Lanphear, 4062 Oak Point Ct., Hayward, CA — 94542.

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NATIONAL HRO. Older pin-type tubes. Rack mount. With six coil sets (not continuous). Fair shape. $95; RME 69, rack mount (no cabinet) fair/good $95; Two meter composite AM transceiver. Works! $15; One WE 101D tube. Good filament. $20.- Paul C. Crum, W9LC, 6272 N. Cicero Avenue, Chicago, IL 60646. (312) 282-3033.

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FOR SALE — HEATHKIT

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HEATHKITS — models IT-5235, IG-5228, IG-37, for TV-FM repair, C. S. Hoffman, 824 Gordon Street, Allentown, PA 18102.

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FOR SALE — PANASONIC

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PANASONIC model R-70 Bowling ball radio. White plastic. Works fine. Key chain missing. $15. J. Albert Warrem, Box 79, Church Street, waverly, PA 18471. Shippng extra on all items. (717) 587-2405 after 12:00 noon let ring.

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FOR SALE —— PLASTICS AND NOVELTIES

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CLASSIC RADIO CATALINS, SUCH A 1949 PEPSI COLA SUPER HETRODYVE BOTTLE2-FEET TALL. 1936 AMC SUPER HETRODYNE MODEL 125-P SENTINAL 284 1947 DETROLA CREAM AND BROWN AND OTHERS. SEND $3.00 FOR LIST AND PRICES. C. T., 5270 E. EUCLID AVENUE, BOULDER, CO 80303.

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FOR SALE — SCHEMATICS, BOOKS, ETC.

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SELL: GOV'T TECHNICAL manuals operation maintence (original) Zenith Trans- Oceanic receiver 7 bands $25.00 each. (Reproduction) above Zenith or R 388 (Collins 51J series) $19,00 each. Others, send want list; Philco radio type J2, table cathedral, restorable, SASE, make offer; I can make full color copies from your photograph of radios, meetings, advertising, etc. Reduced or enlarged to 8" x 11". $1.00 each postpaid. (org. returned); large parts, electronics catalog, used bargains! $1.00; D. Testa, P. O. Box 9064-HS, Newark, NJ 07104.

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RIDER PERPETUAL TROUBLE SHOOTER'S manuals 1 thru 17 plus separate index $500.00 — also - Sam's manuals 1 thru 17 in original envelopes with index on front. Over 600 schematics and pictures $100.00. I will send pre-paid, insured and require signature on delivery. If interested I will send photo write C. T., 5270 East Euclid Avenue, Boulder, CO 80303

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RADIO NEWS IN BOUND VOLUMES 1950 TO 1959 NAME CHANGED TO ELECTRONIC WORLD 1959 TO 1969 20 VOLUMES LIKE NEW ALSO, P.F. REPORTER 4 VOLUMES 1960-61-63-65. RIDER ENCYCLOPEDIA ON OSCILLOSCOPES 1959 LARGE VOLUME HAS SLEEVE 10 LBS. $25.00 RUSS OLMSTED, 608 W. THOMPSON LN., MURFREESBORO, TN 37129.

****

GENE'S RADIO AND ELECTRIC REPAIR service. I specialize in servicing and repairing antique radios and lamps. ——— I have for sale SAM'S PHOTOFACT FOLDER SETS of from numbers 99 to 810, some numbers are missing to sell at 74 cents each or all at 50 cents each. Gene Altland, Gene Radio, 4334 Erie Avenue SW, Navarre, OH 44662. Phone 879-5936.

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HOWARD SAMS #1 TO #115 manuals to 1971 — $4.00 A set. —— Neil Clute, K5VBP, Route 1 Box 61, Marquez, TX 77865.

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SAMS PHOTOFACTS, AUTO RADIO AND TRANSISTOR RADIO SERVICE. 189 BOOKS, GOOD CONDITION — SOME STILL IN CELLOPHANE WRAPPERS. 1966-1973, FIRM PLUS SHIPPING (918) 786-4514, ALAN ROLLOW, RR3 BOX 140, JAY, OK 74346.

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FOR SALE — SCOTT

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ALLWAVE 12 IN NAPIER CONSOLE CABINET, GOOD UNRESTORED CONDITION, CABINET NEEDS MINOR VENEER REPAIR, TUBE COVERS AND COIL CANS NEED RE-CHROMED. TRADE FOR BEST OFFER OF 1940'S JUKEBOXES AND/OR PRE 1941 SLOT MACHINES. ALVIN HECKARD, RD1, BOX 88, LEWISTOWN, PA 17044.

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FOR SALE — SILVER MARSHALL

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SILVER MARSHALL A-18, CONSOLE, EXCELLENT CONDITION OR TRADE FOR OZARKA V-16 CHASSIS. RAY MINER, 1215 B. FT. MADISON, IA 52627. (319) 372-1271.

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FOR SALE — STEWART WARNER

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STEWART WARNER TABLE RADIO MODEL A72T3 - WOOD CABINET - ART DECO SLIDE RULE DIAL - AM - FM — 8 3/4" HIGH X 14 3/4" WIDE — WORKS OK. V.G. $35.00 —— Al Warren, Box 279 — Church Street, Waverly, PA 18471. (717) 587-2405. Shipping extra.

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FOR SALE — TUBES, PARTS, TEST EQUIPMENT, ETC.

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NEW AND USED TUBES, electrolytic capacitors, cone speakers. Send SASE for lists. C. Elmer Nelson, 11 S. Church Street, Princeton, IL 61356.

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LARGE CONSOLE SPEAKER, HAD GREBE SITTING ON TOP —— PHOTO (2) FRONT - BACK $1.00 —— RUSS OLMSTED, 608 W. THOMPSON LANE, MURFREESBORO, TN 37129.

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TELEVISIONS

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FARNSWORTH model 651-P, 10" B/W, 1948, walnut table model, 29 tubes, Completely restored cabinet and electronics, $1,200 plus shipping costs. Panasonic TR001 and Sinclair Nine TVs, $400 plus shipping costs. Send SASE and $1.00 for photo. Bill Russell, 3236 Laurel Canyon, Santa Barbara, CA 93105.

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FOR SALE — ZENITH

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ZENITH TABLE RADIO MODEL 6D2615 — WOOD CABINET — DOME TOP — 9" HIGH X 14 1/4" WIDE V.G. $75.00 —— Al Warren, Box 279 - Church Street, Waverly, PA 18471. (717) 587-2405. Shipping extra.

****

ZENITH MODEL 7G605 TRANSOCEANIC PORTABLE - 1941 (SEE MARCH 1990 HORN SPEAKER) $110, ALSO HAVE ZENITH 6G001Y ZENITH PORTABLE $35.00. PAT STEWART, W7GVC, 1404 RUTH AVENUE, WALLA WALLA, WA 99362 (509) 525-1699.

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EVENTS

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TEXAS — June 16

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Summer Swapmeet — Information; C. F. Crandell - (214) 337-2823.

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CALIFORNIA — June 23

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California Historical Radio Society — Don Steele - (805) 544-2904.

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MARYLAND — June 23

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Mid-Atlantic Antique Radio Club — Joe Koester (301) 725-4229.

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ALABAMA — June 25

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Information: ALHRS (205) 595-2856

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MICHIGAN — July 12-14

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Michigan "Extravaganza" Information: Jim Clark (517) 349-2249.

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NEW HAMPSHIRE — July 21

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NEARC — Summer Swap, Sell Meet and Auction —— Marty Bunis - (603) 746-6127.

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ILLINOIS — August 9-11

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ARCI — Information: Dave Johnson (708) 484-2743.

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wanted

WANTED —— AMATEUR EQUIPMENT

WANT GREBE SHORTWAVE RECEIVER 1920'S 1930'S AMATEUR RADIO TRANSMITTERS, RECEIVERS. HALLICRAFTER HT6 TRANSMITTER-HOWARD 430 438 AMATEUR RECEIVER — R. OLMSTED, 608 W. THOMPSON LANE, MURFREESBORO, TN 37129.

WANTED —— AMECO

15 WATT TRANSMITTER, Ameco, Please contact, M. G. Clute, K5DXV, Route 1, Jewett, TX 75846.

WANTED —— ARMY SURPLUS

I WOULD LIKE TO FIND AN ARMY SURPLUS TRANSMITTER BC-223 AX with TU coil sets. Transmitter uses 801 and NR46 tubes. Would like any repairable or parts set. K4UUZ, 603 W. Thompson Lane, Murfreesboro, TN 37129.

WANTED —— ATWATER KENT

TONE BEAM for model 480. Will pay your price. Interested in buying any old radios. Send description, model and price and I'll reply. H. Thomas Hale III, 2574 Ocelot Avenue, NE, North Canton, OH 44721.

WANTED —— COLLINS

"COLLINS SIGNAL" newsletters; ARRL, "Hints and Kinks." Old Collins receivers and transmitters, Grebe RORD— Parker, W1YG, 87 Cove Road, Lyme, CT 06371. (203) 434-7783.

WANTED —— CROSLEY

SCHEMATIC for a Crosley 4-29 — Jack Emery, Box #84, 5546 Union Street, Lexington, MI 48450.

-CROSLEY RADIOS OF THE 1920'S; ALSO CROSLEY AMPS., SUCH AS CROSLEY IV, 2 STEP AMP., CROSLEY 51A, CROSLEY 50A, RETA, 2B, ETC. WELDON T. HOOK, R.R. 2 BOX 229, NORTH VERNON, IN 47265. PHONE (812) 346-3329.

WANTED —— EMERSON

CABINET FOR EMERSON RADIO MODEL #1002. FRANK TEDESCHI, 2402 BENSON AVENUE, BROOKLYN, NY 11214 (718) 373-1094.

WANTED — GLOBE TROTTER

1959 RCA "Globe Trotter" portable radios. model IT5J or IT5L. Must play perfect! Mike Hanke, 1036 South 15th Avenue, Wausau, WI 54401.

WANTED —— HALLICRAFTERS

HALLICRAFTERS SHORT model SX42. Call (312) 961-7737. Rich.

WANTED —— LITERATURE

SCHEMATIC for a Crosley 4-29 — Jack Emery, Box #84, 5546 Union Street, Lexington, MI 48450.

OPERATING MANUAL and tube data sheets for Jackson Dynamic tube tester model 636. Zerox copy OK, Frank Hoffert, 19605 Chardon road, Cleveland, OH 44117.

WANTED —— NATIONAL

NATIONAL "VIDEO METER" wood or metal case - complete or not —— Fred Emerson, 627 Illinois Avenue, Elgin, IL 60120.

WANTED —— PARTS, TUBES, ETC.

AMATEUR BAND SPREAD COILS FOR NATIONAL SW-3. Also need parts and schematic for Harvey Radio Laboratories amateur transmitter 90-C, circa 1938. Leland Smith, W5KL, HCR-31, Box 147, Jasper, AR 72641. (501) 428-5967.

* jun 90

WANTED: POWER TRANSFORMERS FOR SONORA MODELS A-30, A-32, A-40, 2RP-25, 3R or 4R. Bottom left brass knob for Northern Electric model 50. Sonora and Eveready tubes. John Swett, 8116 Olmway, Olmsted Falls, OH 44138. (216) 235-1463.

AK model 10 RF coil with name plate and single tube socket with binding posts. Bob Nicholson, 3423 S. Long, Topeka, KS 66605. (913) 266-9473.

TRANSMITTING TUBE HF-150 or an equivalent. TCBA, RR6, Box 181, Glens Falls, NY 12801.

RHEOSTAT DIAL for Stromberg Carlson, Joe Warburton, 954 East Madison Street, Brownsville, TX 78520.

JAPANESE SUBS for UZ133D - UF109A - UF134 and UZ135. — C. S. Hoffman, 824 Gordon Street, Allentown, PA 18102.

I NEED A MAROON CABINET and two orange knobs for a Fada 1000 radio. Also need 4 WD11's. Write or phone 1-802-862-4394. Walter Keith, 269 White Street, South Burlington, VT 05403.

ERLA BALLON CIRCLOID coupler 200-500 M for ERLA model S-11. Jim Briscoe, P.O. Box 327, Shoals, IN 47581. (812) 247-2497.

-WANTED —— PHILCO

DIAL AND SPEAKER for Philco no. 90-90A or chassis and speaker. Any condition. S. K. Hughes, 1338 E. Mulberry Street, Phoenix, AZ 85014. 1-602-248-0734.

WANTED —— PILOT

CABINET FOR PILOT TV - 37 CALLED THE "CANDID TV" HAS 3 INCH PICTURE TUBE. RUSS OLMSTED, 608 W. THOMPSON LANE, MURFREESBORO, TN 37129. (615) 893-5344.

WANTED —— RECORDS

EDISON RECORDS WANTED. H. Custer, 30635 Helmandale, Franklin, MI 48025.

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JUNE JULY AUGUST

THE HORN SPEAKER

1990

3
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